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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

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OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

Subject: Metsulfuron methyl (Du Pont Ally) Revised Analytical

Methods.

From: Sami Malak, Ph.D., Chemist Land Mulala

Tolerance Petition Section III

Residue Chemistry Branch

Hazard Evaluation Division (TS-769)

Thru : Philip V. Errico, Head

Tolerance Petition Section III

Residue Chemistry Branch

Hazard Evaluation Division (TS-769)

To : Robert J. Taylor, PM# 25

Fungicide-Herbicide Branch

Registration Division (TS-767)

The petitioner, E. I. Du Pont De Nemours & Company submitted two revised residue methods reports for metsulfuron methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl) amino] carbonyl] amino] sulfonyl] benzoate, a new herbicide intended for use on small grains. The reports are:

- 1. "Determination of Residues of Metsulfuron Methyl in Crops by liquid Chromatography". Du Pont Document No. AMR 104-82, Revised November 26, 1984.
- 2. "Determination of Residues of Metsulfuron Methyl Metabolite A and metabolite Al in cereal Grain Crops by Liquid Chromatography. Du Pont Document No. AMR 238-84. Revised May 13, 1985 (an identical copy with minor clarification of the calculation is included in PP #4F3127, except that the revision date is 7/24/85).

The first report describes a revised method for detection of the parent metsulfuron methyl and replaces the original method (Du Pont Document No.AMR 104-82, EPA Accession NO. 071434) submitted in connection with PP #3G2834. We note that the only difference between the two methods is a <u>further cleanup on silica Bond Elut</u> cartridge in the revised method after the

extraction into toluene from an acidic aqueous solution. All other techniques in both reports are identical. The modification in the revised method did not affect the average recovery of 84%, or the minimum detectibility of 50 ppb in straw and 20 ppb in the remaining grain commodities.

The second report describes a revised method for the detection of metabolites A and Al and replaces the original method (Du Pont Document No. AMR 238-84, EPA Accession No. 072767) submitted in connection with PP #4F3127.

The Company is also requesting that the revised reports be attached to and made part of Section D of PP #4F3127. Report #1 (method AMR 104-82, revised 11/26/84) is stamped "Confidential, Not for Publication". We note, however, that a copy of report #1 that has not been stamped "Confidential" is included in PP #4F3127. Du Pont also requests the initiation of a method trial. The appropriateness of a method trial is presently being evaluated in the 8/1/85 amendment to PP #4F3127.

Conclusions and Recommendations

- 1. RCB recommends that the revised analytical method in report #1 entitled "Determination of Residues of Metsulfuron Methyl in Crops by Liquid Chromatography"; Du Pont No. AMR 104-82, revised November 26, 1984; replaces the original method, Du Pont No. AMR 104-82, accessioin No. 071434, submitted in connection with PP #3G2834. A clean copy not stamped "Confidential" may obtained from PP #4F3127.
- 2. The revised reports #'s 1 and 2; Du Pont No's AM 104-82, revised 11/26/84 and AM 238-84, revised 7/24/85 are already included in Section D of PP #4F3127, accession #072767.
- 3. The appropriateness of a method trial is presently being evaluated in the 8/1/85 Amendment to PP #4F3127.

RDI: P.Errico:10/3/85:RDSchmitt:10/3/85 TS-769-RCB:S.Malak:RM;810:CM#2:X-557-7377:10/3/85 cc: R.F., S.F., Circu, S. Malak, PP #3G2834, PP #4F3127.